

## REMARKS/ARGUMENTS

### The Claim Amendments

Claim 16 has been amended to recite that the double stranded nucleic acid molecule has perfect complementarity between each strand of the molecule. Claims 17-24 are as previously presented. Claims 1-15 were previously canceled.

Support for the amendment to claim 16 can be found, inter alia, at page 17, lines 20-22. Amendments to the claims are made without prejudice and do not constitute amendments to overcome any prior art or other statutory rejections and are fully supported by the specification as filed. Additionally, these amendments are not an admission regarding the patentability of subject matter of the canceled or amended claims and should not be so construed. Applicant reserves the right to pursue the subject matter of the previously filed claims in this or in any other appropriate patent application. The amendments add no new matter and applicants respectfully request their entry.

### 35 U.S.C. § 102 Rejections

Claims 16-24 were rejected under 35 U.S.C. 102(e) as being anticipated by McCall et al. (U.S. Patent No. 6,277,634). Applicants respectfully traverse the rejection.

A claim is anticipated only if each and every element as set forth in the claim is found in a single art reference. M.P.E.P. §2131. The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226 (Fed. Cir. 1989); M.P.E.P. §2131.

Thus, to anticipate the pending claims, McCall et al. must teach a chemically synthesized double stranded nucleic acid molecule having **all** of the following elements: (1) between 14 and 24 nucleotides complementary to the nucleotide sequence of a target RNA or portion thereof; (2) perfect complementarity between each strand of the double stranded nucleic acid molecule; (3) a 5'-cap, 3'-cap, or both a 5' and 3'-cap on one of the strands of the double stranded nucleic acid molecule; and (4) a mixture of modified nucleotides and unmodified nucleotides, wherein the modified nucleotides are 2'-flouro,

2'-*O*-methyl, 2'<sup>3</sup>H or a combination thereof and the unmodified nucleotides are ribonucleotides.

McCall et al. teach minizymes and miniribozymes having various catalytic structures, all of which consist of a stem loop region and a catalytic core region of non-base paired nucleotides (see, for example, Figure 4). None of the minizymes or miniribozymes taught in McCall et al. consist of structures having perfect complementarity between each strand of the double-stranded nucleic acid as is presently claimed. Therefore, McCall et al. does not anticipate the pending claims because it does not teach or disclose each and every one of the elements of the presently claimed invention. Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. § 102(e) rejection based on McCall et al.

Claims 16-24 were rejected under 35 U.S.C. 102(e) as being anticipated by Matulic-Adamic et al. (U.S. Patent No. 5,998,203). Applicants respectfully traverse the rejection.

Matulic-Adamic et al. teach ribozymes having various catalytic structures, all of which consist of a stem loop region and a catalytic core of non-base paired nucleotides (see, for example, Figures 1-6). Similar to the McCall patent, none of the ribozymes taught in Matulic-Adamic et al. consist of structures having perfect complementarity between each strand of the double-stranded nucleic acid as required by the present claims. Therefore, Matulic-Adamic et al. does not anticipate the pending claims because it does not teach each and every element as set forth in the claimed invention. Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. § 102(e) rejection based on Matulic-Adamic et al.

#### **Obviousness-Type Double Patenting Rejection**

Claims 1-24 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as allegedly being obvious over claims 1-6 of U.S. Patent No. 6,673,611.

Without acceding to the merits of the rejection, Applicant will consider filing a terminal disclaimer upon allowance of the pending claims.

**Conclusion**

Applicant respectfully requests that the amendments and remarks be considered and that the Amendment be entered prior to examination of the application. If the Examiner has any questions regarding this Amendment, the Examiner is invited to call the undersigned attorney at (312) 935-2367.

Respectfully submitted,  
**McDonnell Boehnen Hulbert & Berghoff LLP**

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By: \_\_\_\_\_

  
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